

BIOLOGICAL SAFETY CABINETS:

Certification, Maintenance, Moving and Disposal

Biological Safety Cabinets (BSCs) are the most widely used and accepted primary containment devices. When properly used in research and teaching activities involving the manipulation of hazardous biological agents, the biological safety cabinets are effective in controlling and containing aerosols and particulates.

Biological Safety Cabinets (BSCs) must not be confused with other laminar flow devices or 'laminar flow clean benches'; in particular, horizontal flow clean benches that direct air towards the operator should not be used for handling infectious, toxic or sensitizing materials.

Correct use and maintenance of BSCs

The correct location, installation, testing and **certification** of biological safety cabinets are critical to its performance in containing aerosols.

- Biological Safety Cabinets must be certified **annually and when moved or relocated**. (PHAC- CBSG)
- Certification should be done by trained service personnel to CSA Z316.3-95 or NSF 49 standards or subsequent modifications
- Laboratory personnel must be trained in the correct use and maintenance.
- If you require assistance to determine the correct location, please contact Environmental Health and Safety at 474-6633.

Contact information for our local certifier is found on page 2.

Moving or Disposing BSCs

Visit the [EHS Decommissioning website](#) for complete details and current versions of all the applicable forms and guidance documents:

Moving a BSC can cause damage to the HEPA filter and its seals and potentially exposes the movers and future certifiers and users to biohazardous material!

- ! The Biological Safety Advisory Committee has adopted a **zero tolerance policy regarding the relocation of BSCs without prior decommissioning**. In virtual all circumstances the cabinet will require **formaldehyde decontamination as well as surface disinfection** before being moved. This includes scenarios where the cabinet is just being moved between bays in a lab or to another location on the same floor.
- The formaldehyde decontamination report must be 1) attached to the [Laboratory Hazard Clearance Form](#) submitted with the work order for moving and/or 2) copies of both documents should be posted on the BSC readily visible for the movers.
- Submit a [Biosafety permit amendment](#) and indicate the new location of the BSC. In the Modification Summary in Section 1 of the Biosafety Permit questionnaire, provide the number for the Con-test formaldehyde decontamination report.

Disposing of a BSC can potentially expose movers and the public to biohazardous material. The PHAC-Canadian Biosafety Standards (CBS) require that all *'contaminated materials and equipment leaving the lab for servicing or disposal must be appropriately decontaminated and labeled or tagged-out as such.'*

- Formaldehyde decontamination is mandatory. The report must be 1) attached to the [Decommissioning of Lab Equipment Form](#) submitted to [Capital Asset Disposal](#) and copies of both documents should be posted on the BSC readily visible for the movers.
- Submit a [Biosafety permit amendment](#) to remove the BSC from your Biosafety Permit. In the Modification Summary in Section 1 of the Biosafety Permit questionnaire, provide the number for the Con-test formaldehyde decontamination report.

BSC Certification:

Con-Test (<http://www.con-test.com/>) is our BSC certifier. Local contact information can be found below. Con-Test has a long history of service with the university and provides NSF field accredited service technicians. BSCs must be certified annual or after being moved or serviced.

To reach Con-Test to arrange for testing, servicing or repair of a Biological Safety Cabinet:

CON-TEST
20-520 Westney Rd S
Ajax ON L1S 6W5
Tel: (Toll Free) 1-800-321-3816

Winnipeg Contact:
David Philips david@con-test.com
Tel: (204)230-0140
Toll Free Tel: 1-800-321-3816

- ✓ BSC owners receive a full certification report and a certification sticker that is placed on the BSC so that cabinet status can be easily checked by all users.
- ✓ The Biosafety Program is sent a copy of the report which is entered in our EHSA database and can be attached to the individual Biosafety permit information. This assists BSC owners in that these reports are not required to be submitted with permit and project approval applications.
- ✓ Con-Test service technicians contact BSC owners prior to the BSC certification expiry date and arrange for certifications to be grouped by location. This reduces travel time for the service technicians, keeps certification cost as low as possible for the owners, and assists Biosafety Permit holders with permit compliance.

! **Con-Test services are paid for by the BSC owner through the U of M procurement service [EPIC](#). EPIC requires that the Purchase Order (PO) Date is earlier than the date on the invoice. The PO must be generated and approved by an EPIC trained individual before the service is provided. For EPIC training refer to the information on the [EPIC website](#).**

Other services provided by Con-Test - (These are additional services not included in the certification cost):

- HEPA filter replacement and other adjustment and/or repairs as required by the applicable standard or manufacturer's specifications to achieve certification. Emergency response services can typically be delivered within a reasonable response time (~48hours)
- Decontamination for decommissioning of a BSC for disposal or re-location. Formaldehyde or chlorine dioxide options are available.
- As well as annual testing and certification of BSCs, Con-test provides these services for laminar flow clean benches and incubators at the request of the owners.